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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,662	10/18/2004	Kazunori Sægusa	5404/93	6375
757	7590	11/30/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			ASINOVSKY, OLGA	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/511,662

Applicant(s)

SAEGUSA ET AL.

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 10/18 & 12/17/2005.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.



## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyatake et al U.S. Patent 6,153,694.

Claimed invention is a polyorganosiloxane-containing graft copolymer (A) comprising polyorganosiloxane particles grafted with a polymerizable vinyl monomer, and said composition comprising an antioxidant (B).

Miyatake discloses silicone rubber latex grafted with a graft polymerizable an aromatic vinyl monomer or a vinyl cyanide monomer, or a vinyl halide monomer or an alkyl (meth)acrylate monomer, col. 34, lines 45-49 and col. 14, lines 13-35.

The vinyl monomers are readable in applicants' claims 1 and 5. Silicone rubber latex is readable for being polyorganosiloxane particles in the present claim 4.

Additives such as an antioxidant and a flame retarder can be added, col. 17, lines 43-46, for the present claim 12. An average particle diameter of latex is 359 nm, col. 22, line 46, for the present claim 2. A solubility parameter for a vinyl monomer specified in the present claim 3 would be expected in Patent 6,153,694, because vinyl monomers in Patent 6,153,694 are the same as defined in the present claim 5.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-11 and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyatake et al U.S. Patent 6,153,694 as applied to claims 1-5 and 12 above, and further in view of Sheu U.S. Patent 6,424,771, and further in view of JP 59161448 A (for the present claim 10).

Miyatake is broadly suggested an antioxidant and a flame retarder, col. 17, lines 43-46.

Sheu discloses a stable antioxidant system in relatively low concentration for an organic coating material, col. 3, lines 38-40. The antioxidant system can include at least two antioxidants, one of which has a phenyl group and other having triazine-triones, col. 6, lines 5-30 and col. 10, lines 1-3. The chemical structure of triazine-triones compound at Fig. 4 in Sheu is readable for being an antioxidant derivative specified in the present claim 8. An antioxidant having a phenol group represented by Fig. 3 in Sheu invention is readable for being a phenolic antioxidant in the present claim 9. A mixture of at least two antioxidant components for the present claim 7 is readable in an antioxidant system in Sheu invention. The amount of said antioxidant system from 0.01 to 10% by weight,

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col. 6, line 5, is readable in the present claim 11. A colloidal filler such as fumed silica, col. 9, line 17 and col. 6, line 67 can be considered for being a flame retarder.

It would have been obvious to one of ordinary skill in the art to modify a graft copolymer in Miyatake invention by employing antioxidant system and colloidal filler as a flame retarder suggested by Sheu invention since antioxidants and a flame retarder are teaching in Miyatake invention. It is the examiner position to define antioxidant and a flame retarder in Miyatake invention as antioxidant system and a flame retarder as suggested by Sheu.

JP 59161448 discloses a sulfur-based antioxidant for a polymeric material, Abstract.

It would have been obvious to one of ordinary skill in the art to employ a sulfur-based antioxidant in JP'448 into a modified graft copolymer in Miyatake invention for the purposes to increase weather resistance, processability and thermal discoloration.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art has been considered.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

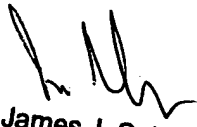
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Olga Asinovsky  
Examiner  
Art Unit 1711

O.A.  
November 27, 2005

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700